

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC 20554

Amendment of Part 18 of the Rules to)	
Expand the Exemption for ISM Devices)	RM No. 11814
Used as Components in Transportation)	
Vehicles)	

To: The Commission

**COMMENTS OF
AEROSPACE INDUSTRIES ASSOCIATION**

The Aerospace Industries Association (“AIA”) hereby expresses the support of its members for the Petition for Rulemaking (“Petition”) that was filed by The Boeing Company (“Boeing”) requesting the streamlining of the equipment certification rules for industrial, scientific and medical (“ISM”) devices used as components in aircraft and other transportation vehicles for operational and monitoring purposes.

The AIA is the nation’s most authoritative and influential voice of the aerospace and defense industry. AIA represents more than 100 leading aerospace and defense manufacturers, along with a supplier base of nearly 200 associate members, all of which supports more than 2.4 million U.S. jobs. The aerospace and defense industry accounts for nearly ten percent of all U.S. exports, and is the nation’s second largest exporting industry. These sales represent the sustained growth of high-skill, high-wage American jobs and innovation at every level of the supply chain. This economic engagement also provides the U.S. with an opportunity to extend its influence in countries and regions critical to our national security and foreign policy interests.

The AIA and its members advocate in support of regulatory initiatives that keep our country strong, bolster our capacity to innovate, and spur our economic growth. Of particular focus is ensuring robust investment in research and development in support of national defense

and civil aviation. A core area of these initiatives is the continued development of autonomous aircraft and avionics systems and their expanded use in civil aviation. Such developments will facilitate the continued safe and efficient operation of commercial aircraft, while increasing the overall capacity of the national airspace system. Further innovation in autonomous aircraft systems will also continue to ensure the innovation and leadership of the U.S. aerospace industry in the development and export of aircraft and aerospace systems used throughout the world.

AIA believes that Boeing's Petition is fully consistent with the goals of its members. As the Petition observes, wireless sensors and other devices that generate low levels of RF emissions are increasingly being used as components in aircraft for a range of purposes.¹ These devices monitor environmental conditions and the status of countless operational and safety systems, including fuel systems, engines, flight control, airframe, and landing systems. Small RF generating components are designed and incorporated into aircraft mainframes in a manner that ensures they pose no risk of causing harmful interference to other RF sensitive systems within the aircraft, or to wireless devices employed by flight crews and passengers in or near the aircraft. The inclusion of such devices in aircraft and the processes for testing their reliability is already subject to extensive regulation by the Federal Aviation Administration. Therefore, it is appropriate to exempt these devices from the equipment certification rules maintained by the Commission.

As Boeing notes, the Commission has long maintained an exemption for digital processing devices that are regulated under Part 15 of the Commission's rules and are used as components in

¹ See Amendment of Part 18 of the Rules to Expand the Exemption for ISM Devices Used as Components in Transportation Vehicles, *Petition for Rulemaking of The Boeing Company*, RM No. 11814, at 10-12 (Aug. 6, 2018) ("*Petition*").

transportation vehicles such as aircraft.² This exemption has existed since 1980 and has not resulted in any reported cases of harmful interference to authorization spectrum uses. The Commission has also twice extended its exemption to cover ISM devices that are regulated under Part 18 of the Commission's rules and are used as components in certain medical equipment.³ In each case, the Commission justified these exemptions based on the fact that the "potential benefits" of requiring testing and compliance procedures for such RF generating components "would unlikely be justified by the costs."⁴

Consistent with these prior actions, the Commission should adopt a Notice of Proposed Rulemaking ("NPRM") seeking comment on the modification of Section 18.121 of its rules to state that ISM devices used exclusively in the monitoring and control systems of any transportation vehicle are subject only to the provisions of Sections 18.105, 18.109 through 18.119, 18.301 and 18.303 of Part 18. As requested by Boeing, this exemption would not extend to ISM devices used to power transportation vehicles⁵. AIA understands that the Commission is considering in a separate proceeding the unique issues associated with using RF emitting devices to transfer

² See *id.* at 6 (citing 47 C.F.R. § 15.103; Amendment of Part 15 to Redefine and Clarify the Rules Governing Restricted Radiation Devices and Low Power Communication Devices, FCC 80-148, *Order on Reconsideration*, 79 F.C.C.2d 67, ¶¶ 54-55 (April 9, 1980) ("1980 Order on Reconsideration")).

³ See *id.* at 10 (citing Amendment of Part 18 of the FCC Rules to exempt medical ultrasonic diagnostic and monitoring equipment from technical standards, FCC 86-493, *Report and Order*, 1 FCC Rcd 553 (Nov. 12, 1986); Amendment to Part 18 to Remove Unnecessary Regulations Regarding Magnetic Resonance Systems, FCC 94-155, 9 FCC Rcd 3389 (July 12, 1994)).

⁴ See *1980 Order on Reconsideration*, ¶ 55.

⁵ See *Petition* at 11 (seeking to exclude from the scope of Boeing's petition, all RF emitting devices that are used to power electric vehicles, or any consumer devices within those vehicles).

electrical power to transportation vehicles and to consumer devices and AIA also supports this separate inquiry⁶.

At the same time, the Commission is justified in streamlining its rules for RF emitting components used for system monitoring and operational control of aircraft and other transportation vehicles. Such action would significantly reduce regulatory burdens for aircraft manufacturers in the U.S. and for the developers of RF emitting components used in aircraft systems. The adoption of such an exemption would also advance the Commission's initiative to promote the development of new technologies and services consistent with Section 7 of the Communications Act.⁷ This streamlining effort would also be consistent with the goals of this Administration to eliminate unnecessary and burdensome regulations that inhibit the growth and development of U.S. commerce⁸. AIA therefore requests that the Commission promptly adopt an NPRM to streamline its Part 18 certification requirements in order to promote further innovation and efficiencies in the aircraft industry.

Respectfully submitted,

AEROSPACE INDUSTRIES ASSOCIATION

⁶ See Amendment of the Commission's Rules to Allow Next-Generation Wireless Charging Technology for Electric Vehicles Under Part 18, RM No. 11815 (Sept. 5, 2018).

⁷ See Encouraging the Provision of New Technologies and Services to the Public, FCC 18-18, *Notice of Proposed Rulemaking*, GN Docket No 18-22, ¶ 1 (Feb. 23, 2018) (observing that technological advancements are "vital in fueling the economic engine of the United States and benefiting consumers").

⁸ See, e.g., David Shepardson, New FCC Chair Vows to Shrink Industry Regulations, Reuters (Jan. 31, 2017).

A handwritten signature in dark ink, appearing to read 'D. Silver', with a long horizontal stroke extending to the right.

By: _____

David Silver
Vice President, Civil Aviation
Aerospace Industries Association
1000 Wilson Blvd., Suite 1700
Arlington, VA 22209
(703) 358-1000

October 22, 2018